

Washington, DC - Congressman Joe Sestak (PA-07) voted for legislation that will help make possible a greener, more sustainable economy, address the moral imperative to reduce the human impact on climate change, and restore this nation to a position of global leadership in the effort to reduce worldwide emissions and the effects of global warming. The American Clean Energy and Security Act (ACES), H.R. 2998 (formerly H.R. 2454) passed the House of Representatives today by a vote of 219 to 212.

“I do not want to be on the wrong side of history,” said Congressman Sestak. “Fifteen EPA administrators have made clear the need to address global warming and the provisions of this bill not only make environmental sense, but also economic and strategic sense. We need to spark an unprecedented transition to alternative, clean, and renewable power, to create a new clean energy economy and halt damage to our environment. Last year’s spike in the cost of gasoline, not to mention all of the other instances in which energy prices have hurt us economically in the last three decades, provide a clear signal that the days of our reliance on fossil fuels must end. In Pennsylvania, clean energy companies like Iberdola, Conergy and Gamesa have brought hundreds of new jobs. It is time to lay the framework for far-reaching and sustainable solutions.

“The American Clean Energy and Security Act continues to move this country toward a future powered by renewable energy sources such as wind and solar power. While not perfect, it is a long needed step in the right direction. Two weeks ago, I raised concerns with Speaker Nancy Pelosi because I believed the bill did not go far enough to encourage renewable and non-emitting power sources. However, I voted for this bill because it makes real progress by investing in the transformation and strengthening of our economy, restoring the country into a position of leadership as global climate change talks start this fall in Copenhagen, and takes strides toward mitigating the negative affects of climate change. Importantly, the Act also provides protections for consumers, especially those who are the most economically vulnerable.

ACES will:

Require electric utilities to meet 20 percent of their electricity demand through renewable energy sources and energy efficiency by 2020.

Invest in new clean energy technologies and energy efficiency, including energy efficiency and renewable energy (\$90 billion in new investments by 2025), carbon capture and sequestration (\$60 billion), electric and other advanced technology vehicles (\$20 billion), and basic scientific research and development (\$20 billion).

Mandate new energy-saving standards for buildings and appliances, and promote energy efficiency in industry.

Reduce carbon emissions from major U.S. sources by 17 percent by 2020 and by more than 80 percent by 2050 compared to 2005 levels. Complementary measures in the legislation, such as investments in preventing tropical deforestation, will achieve significant additional reductions in carbon emissions.

Protect consumers from energy price increases. The Congressional Budget Office (CBO) and the U.S. Environmental Protection Agency (EPA) have estimated the cost per family as about the price of a postage stamp a day and energy bills for low-income families will actually decrease. According to the CBO, the bill not only will not cost the federal government, it will actually be a net revenue generator for the federal budget.

“I will continue to support efforts to transform our economy through the development of clean, alternative energy sources. This will not only position the United States better within the global economy, and put us on a stronger strategic footing, but also fulfill our moral obligation to address global warming,” said the Congressman.

“There is much more we can do. My 31 years in the United States Navy and the experience I accrued during my military career have affirmed my belief that Americans know the meaning of sacrifice. When called upon to do great things, this country not only rises to meet the challenge; it prospers. I am optimistic that we can work together to achieve real and lasting energy and environmental security, and I look forward to the fruitful years that lie ahead.”

The bill included an amendment proposed by the Congressman to require the Secretary of Energy to study how Thorium, a nuclear element, can be used to address our energy needs. The Congressman believes that nuclear energy needs to be part of our mid-term energy policy to increase domestic energy production and reduce our emissions. In addition, he understands

that we must overcome nuclear waste issues. Under the amendment, Thorium could be used with or as a substitute for Uranium in nuclear reactors. Thorium-powered nuclear reactors have the potential to be more efficient and produce less than 1 percent of the waste of today's Uranium nuclear reactors, while emitting no greenhouse gases. Using Thorium reactors do not breed plutonium, and can, in fact, be designed to "burn" plutonium into non-weapons grade material and, thus, decrease weapons proliferation. Additionally, Thorium nuclear reactors can help eliminate spent Uranium.

Other provisions of the bill include:

Clean Energy Provisions

Renewable Electricity Standard

The American Clean Energy and Security Act (ACES) requires retail electric suppliers to meet a growing percentage of their load with electricity generated from renewable resources and electricity savings. The combined renewable electricity and electricity savings requirement begins at 6 percent in 2012 and gradually rises to 20 percent in 2020. At least three quarters (75%) of the requirement must be met by renewable energy, except that upon receiving a petition from the governor, the Federal Energy Regulatory Commission can reduce the renewable requirement to three fifths (60%). In 2020, 15 percent of the electricity load in each state must be met with renewable electricity and 5 percent with electricity savings. Upon petition by the governor, the renewable requirement can be reduced to 12 percent and the electricity savings can be increased to 8 percent.

Investments in Clean Energy

ACES requires major sources of carbon emissions to obtain a pollution permit called an "allowance" for each ton of carbon dioxide or its equivalent that they emit. Through 2025, 13 percent of these allowances are allocated to investments in clean energy and energy efficiency. Using EPA estimates of allowance prices, ACES invests over \$190 billion through 2025 in clean energy and energy efficiency programs, including: \$90 billion in state programs to promote renewable energy and energy efficiency; \$60 billion in carbon capture and sequestration technologies; \$20 billion in electric and other advanced technology vehicles; and \$20 billion in

basic research and development into clean energy and energy efficiency. The investments in carbon capture and sequestration include \$10 billion generated through a small “wires charge” on electricity generated through fossil fuels.

Investments in clean energy continue after 2025, with 5 percent of allowances being devoted to renewable energy and energy efficiency, 5 percent to carbon capture and sequestration, and 1.5 percent to research and development.

Supporting Private Investment in Clean Energy

The bill establishes a self-sustaining Clean Energy Deployment Administration to support private investments in clean energy technologies, including nuclear power. Other provisions promote private investment in clean energy by reforming the existing Title 17 loan guarantee program.

Modernizing the Electricity Grid

ACES includes provisions to promote deployment of smart-grid technology and enhanced transmission planning.

Energy Efficiency Provisions Building Standards

ACES establishes new standards for building efficiency, requiring new buildings to be 30 percent more efficient in 2012 and 50 percent more efficient in 2016. States are offered allowances that they can sell to support adoption and enforcement of the new standards. The Department of Energy must enforce the standards in states that do not incorporate the building standards into their state building codes.

Appliance Standards- ACES mandates new efficiency standards for lighting products, commercial furnaces, and other appliances.

Vehicle Standards- The ACES discussion draft included provisions to harmonize federal fuel economy standards with EPA carbon emission standards and California's standards for light-duty vehicles. These provisions were dropped in the reported bill after the Administration reached an agreement on light-duty fuel economy standards with the automakers and California. The reported bill retains requirements for the EPA to promulgate carbon emission standards for heavy-duty vehicles and off-road vehicles, such as construction equipment, trains, and large ships. ACES also integrates consideration of climate change into the existing transportation planning process to further reduce transportation-related energy consumption.

Other Efficiency Measures- ACES contains measures to increase the efficiency of water use and promote energy savings by the federal government and other public institutions. The legislation creates a new energy efficiency program for small utilities with dedicated funding.

Global Warming Provisions

ACES contains three primary programs for reducing dangerous carbon emissions that cause global warming:

- A cap on large domestic sources of emissions;
- A program to reduce tropical deforestation; and
- An offset program.

In addition, ACES caps emissions of global warming pollutants that are substitutes for ozone-depleting chemicals, and it requires the EPA to set performance standards for some uncapped sources of emissions. Taken together, these programs will reduce carbon emissions by 28 percent to 33 percent below 2005 levels by 2020. By 2050, ACES will reduce carbon emissions by over 80 percent below 2005 levels through these programs.

Capping Carbon Emissions from Large Sources

Starting in 2012, ACES establishes annual tonnage limits on emissions of carbon and other global warming pollutants from large U.S. sources like electric utilities and oil refiners. Under these limits, carbon pollution from large sources must be reduced by 17 percent below 2005

levels by 2020 and 83 percent below 2005 levels by 2050. To achieve these limits, ACES establishes a system of tradable permits called “emission allowances” modeled after the successful Clean Air Act program to prevent acid rain. This market-based approach provides economic incentives for industry to reduce carbon emissions at the lowest cost to the economy.

Preventing Tropical Deforestation

ACES directs EPA and the State Department to use 5 percent of the allowances to secure agreements from developing nations to prevent tropical deforestation. This program will reduce carbon emissions by an additional 10 percentage points below 2005 levels by 2020.

Emission Offsets

ACES allows capped sources to increase their carbon emissions if they can obtain offsetting emission reductions from uncapped sources at a lower cost. The legislation allows capped sources to use offsets to acquire up to 2 billion tons of emission credits annually. Half of these credits must come from domestic sources, except that if insufficient domestic offsets are available, up to 1.5 billion tons of emission credits can be obtained from international offset projects. Starting in 2017, ACES requires capped sources to turn in five tons of international offsets to receive four tons of emission credits. This mechanism will reduce carbon emissions by up to an additional five percentage points below 2005 levels by 2020.

ACES contains multiple provisions to ensure the integrity of offsets, including review by an independent scientific panel. Offsets may not be obtained from sources in a foreign nation until the United States has entered into an agreement with the originating nation establishing the terms of the offset program.

Cost-Containment Measures

ACES contains numerous cost-containment measures recommended by an industry-environmental coalition called the U.S. Climate Action Partnership (USCAP). These include unlimited banking, a two-year compliance period (which allows borrowing one year in

advance), and a strategic reserve of allowances that are available for auction if allowance prices exceed 160 percent of their three-year average. The proceeds of any sales from the reserve will be used to acquire additional international offsets, which will replenish the reserve at a low cost and result in additional reductions in carbon emissions. In addition, ACES establishes a minimum floor price for auctioned allowances of \$10 (in 2009 dollars) to provide stability and investment certainty.

Carbon Capture and Sequestration

ACES uses a combination of regulatory requirements and financial incentives to ensure that new coal-fired power plants will operate with carbon capture and sequestration (CCS) technology. All new coal plants permitted after 2020 must use CCS when they commence operations. Coal plants permitted between 2015 and 2020 lose eligibility for federal financial assistance if they do not use CCS when they commence operations; if they do not use CCS when they commence operations, they must retrofit CCS by no later than 2025 without federal financial assistance. Coal plants permitted between 2009 and 2015 lose eligibility for federal financial assistance if they do not retrofit CCS within five years after commencing operations; if they do not retrofit CCS by this date, they must retrofit CCS by no later than 2025 without federal financial assistance. The 2025 retrofit deadline is accelerated if four gigawatts of electricity generation is deployed with CCS before 2025; it may also be extended by EPA by up to 18 months on a case-by-case basis.

Allowance Provisions

ACES requires that major U.S. sources of emissions obtain an allowance for each ton of carbon or its equivalent emitted into the atmosphere. EPA estimates that in 2005 dollars, these allowances will cost \$11 to \$15 in 2012 and increase to \$22 to \$28 by 2025. These allowance price estimates are consistent with estimates by the Congressional Budget Office. According to CBO, allowance prices in 2005 dollars will be \$14 in 2012 and increase to \$28 by 2025. At these allowance prices, the total value of the allowances created under the legislation ranges from \$50 to \$70 billion in 2012 to \$90 to \$120 billion in 2025.

For the period from 2012 through 2025, 55 percent of the allowances will be used to protect consumers from energy price increases; 19 percent to assist trade-vulnerable and other industries make the transition to a clean energy economy; 13 percent to support investments in clean energy and energy efficiency; and 10 percent will be used for domestic adaptation, worker

assistance and training, prevention of deforestation, and international adaptation. The remainder (3 percent of allowances) will be used to help ensure that ACES is budget neutral.

From the period from 2026 through 2050, up to 58 percent of the allowances will be used to protect consumers; 19 percent for domestic adaptation, worker assistance and training, prevention of deforestation, and international adaptation; 12 percent to support investments in clean energy and energy efficiency; 7 percent to ensure budget neutrality; and at least 4 percent to assist trade-vulnerable and other industries.

Under ACES, approximately 80 percent of allowances are distributed without charge during the early years of the program to ease the transition to a clean energy economy. This transition period starts to phase out after 2025. By 2031, about 70 percent of the allowances are auctioned.

Protection of Consumers

ACES establishes five programs to protect consumers from energy price increases. They cover: electricity price increases; natural gas price increases; heating oil price increases; protecting low- and moderate-income families; and providing tax dividends to consumers. In combination, these programs substantially reduce the impact of ACES on American consumers. EPA estimated that the global warming provisions in the ACES discussion draft would cost the average household \$98 to \$140 per year, less than a postage stamp per day. EPA has estimated that the changes to ACES made in Committee will further reduce the costs of the legislation.

Protection from Electricity Price Increases

Electricity price increases will be regional in nature, with the greatest increases occurring in the coal-dependent regions of the country. To mitigate these price increases, the regulated utilities that distribute electricity to consumers will receive 32 percent of allowances through 2025 under a formula that distributes half of the allowances based on emissions and half based on electricity generation. These utilities are directed to use these allowances exclusively to keep rates low and, to the extent they use rebates, to do so to the maximum extent practicable by reducing the fixed-rate portion of consumer electricity bills. The legislation contains a new

ratepayer fairness provision that protecting against windfalls by providing that no local distribution company should receive more allowances than necessary to cover its direct and indirect costs.

Protection from Natural Gas Price Increases

To mitigate increases in natural gas prices, the regulated utilities that distribute natural gas to consumers will receive 9 percent of allowances from 2016 through 2025. One-third of these allowances must be used for energy efficiency programs. The remainder must be passed to consumers through lower prices under provisions similar to those that apply to the regulated electric utilities.

Protection from Heating Oil Price Increases

To mitigate increases in home heating oil prices, states will receive 1.6 percent of allowances through 2025 under a formula based on home heating oil use. These allowances must be used for rebates to consumers and investments in energy efficiency.

Protection of Low- and Moderate Income Families

The electricity, natural gas, and heating oil provisions mitigate the costs of ACES on all consumers. In addition, ACES directs that 15 percent of the allowances be auctioned and the proceeds distributed back to consumers through a combination of refundable tax credits and electronic benefit payments. The Center for Budget and Policy Priorities estimates that these provisions will fully protect the bottom quintile of families and part of the next quintile from any direct or indirect energy price increases.

Consumer Climate Dividend

Under ACES, many of the allowance provisions phase out starting in 2026. As these allowance

allocations are phased out, ACES directs that the remaining allowances be auctioned and the proceeds distributed to consumers through tax credits.

Protection of Trade-Vulnerable and Other Industries

Pursuant to the Inslee-Doyle program, energy-intensive, trade-exposed industries that make products like iron, steel, cement, and paper will receive allowances to cover their increased costs. The number of allowances set aside for this program will equal 15 percent of the allowances in 2014 and then decrease based on the percent reductions in the carbon emissions cap. These allowances will phase out after 2025 unless the President decides the program is still needed.

In addition, oil refiners will receive 2 percent of allowances starting in 2014 and ending in 2026, and merchant coal producers and electricity producers obligated to supply electricity under long-term contracts will receive 5 percent of allowances through 2025. The legislation provides an additional 0.25 percent of allowances for small business refiners from 2014 through 2026.

Investments in Clean Energy and Energy Efficiency

States will receive 10 percent of allowances from 2012 through 2015; 7 percent in 2016 and 2017; 6 percent from 2018 through 2021; and 5 percent thereafter for investments in renewable energy, energy efficiency, and pollution reducing transportation projects. Two percent of allowances from 2014 through 2017 and 5 percent thereafter will be available to electric utilities to cover the costs of installing and operating carbon capture and sequestration technologies (from 2014 through 2017, a small portion of these allowances will be used to offset the costs to the Treasury of the Carbon Storage Research Corporation, which will invest an additional \$10 billion in carbon capture and sequestration technologies). Three percent of allowances from 2012 through 2017 and 1 percent of allowances from 2018 through 2025 will be available for investments in electric vehicles and other advanced automobile technology and deployment. One-and-a-half percent of allowances in each year will be allocated to support research and development in advanced clean energy and energy efficiency technologies.

Domestic Adaptation

From 2012 through 2021, 2 percent of allowances will be allocated to prepare the United States to adapt to the impacts of climate change. The amount of allowances allocated for domestic adaptation will increase to 4 percent from 2022 through 2026 and to 8 percent thereafter. Half of these allowances will be used for wildlife and natural resource protection and half for other domestic adaptation purposes, including public health.

Preventing Tropical Deforestation and International Adaptation

From 2012 through 2025, 5 percent of allowances will be allocated to prevent tropical deforestation and build capacity to generate international deforestation offsets. The allowances allocated to this program will be reduced to 3 percent from 2026 through 2030 and to 2 percent thereafter. From 2012 through 2021, 2 percent of allowances will be allocated for international adaptation and clean technology transfer. The amount of allowances allocated for these purposes will increase to 4 percent from 2022 through 2026 and to 8% thereafter. Half of these allowances will be used for adaptation and half for clean technology transfer.

Worker Assistance and Job Training

From 2012 through 2021, 0.5 percent of allowances will be allocated for worker assistance and job training. This amount will increase to 1 percent thereafter.

Congressional Budget Office (CBO) Score

According to the CBO score of the legislation, ACES meets requirements of a pay-as-you-go government. For scoring purposes, CBO considers the creation of allowances as an increase in revenues and the free distribution of allowances as an offsetting outlay. Using this methodology, CBO estimates that the legislation will raise federal revenues by \$846 billion over ten years and increase direct spending by \$821 billion, resulting in a net \$24 billion reduction in the federal budget deficit.

Born and raised in Delaware County, former 3-star Admiral Joe Sestak served in the Navy for 31 years and now serves as the Representative from the 7th District of Pennsylvania. He led a series of operational commands at sea, including Commander of an aircraft carrier battle group of 30 U.S. and allied ships with over 15,000 sailors and 100 aircraft that conducted operations in Afghanistan and Iraq. After 9/11, Joe was the first Director of "Deep Blue," the Navy's anti-terrorism unit that established strategic and operations policies for the "Global War on Terrorism." He served as President Clinton's Director for Defense Policy at the National Security Council in the White House, and holds a Ph.D. in Political Economy and Government from Harvard University. According to the office of the House Historian, Joe is the highest-ranking former military officer ever elected to the Congress.

###